

REMARKS

Claims 1-17 are pending in this application. Claims 1-13 stand rejected and claims 14-15 are withdrawn from consideration. By this Amendment, claims 1 and 10 have been amended and new claims 16 and 17 have been added. The amendments made to the claims do not alter the scope of these claims, nor have these amendments been made to define over the prior art. Rather, the amendments to the claims have been made to improve the form thereof. In light of the amendments and remarks set forth below, Applicant respectfully submits that each of the pending claims is in immediate condition for allowance.

Claims 1-13 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully requests reconsideration and withdrawal of this rejection. Applicant explicitly recites "a heat conduction part being formed of the same conductive materials as the connection hole and the metal wiring layer, said heat conduction part extending toward an upper layer side along a path different from a wiring path comprising a connection hole and a metal wiring for signal transmission, the heat conductor part including at least one metal wiring layer not being for signal transmission."

Applicant respectfully submits that claims 1 and 10 use English language words not inconsistent with the specification. Additionally, Applicant respectfully submits that the claimed heat conduction part is not used for signal transmission. Thus, the present claim is unlike the prior art structures and Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph.

Claims 1-13 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,919,235 ("Yamazaki"). Applicant respectfully requests reconsideration and withdrawal of this rejection.

To anticipate a claim under 35 U.S.C. § 102, the cited reference must disclose every element of the claim, as arranged in the claim, and in sufficient detail to enable one skilled in the art to make and use the anticipated subject matter. See, PPG Industries, Inc. v. Guardian Industries Corp., 75 F.3d 1558, 1566 (Fed. Cir. 1996); C.R. Bard, Inc. v. M3 Sys., Inc., 157 F.3d 1340, 1349 (Fed. Cir. 1998). A reference that does not expressly disclose all of the elements of a claimed invention cannot anticipate unless all of the undisclosed elements are inherently present in the reference. See, Continental Can Co. USA v. Monsanto Co., 942 F.2d 1264, 1268 (Fed. Cir. 1991).

Among the limitations of independent claim 1 not present in the cited reference is a:

a heat conduction part being formed of the same conductive materials as the connection hole and the metal wiring layer, said heat conduction part extending toward an upper layer side along a path different from a wiring path comprising a connection hole and a metal wiring for signal transmission, the heat conductor part including at least one metal wiring layer not being for signal transmission.

In particular, Applicant's claim explicitly recites that the heat conduction part includes at least one metal wiring layer not being for signal transmission.

According to the present invention, the heat conduction device includes connection holes for configuring a multi-layer wiring structure and conductive member formed of the same conducting material as metal wiring layers of the multi-layer wiring structure. See, e.g., Fig. 2. Thus, the present invention includes at least two layer of conducting materials wherein the metal wiring layer is not used for signal transmission.

In contrast, in Yamazaki, the elements such as 611 and 610 are lead wiring elements connected to the wiring 606. Thus, the lead wiring portions 611 and 610 are for signal conduction and not heat dissipation.

Applicant has responded to all of the rejections and objections recited in the Office Action. Reconsideration and a Notice of Allowance for all of the pending claims are therefore respectfully requested.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

If the Examiner believes an interview would be of assistance, the Examiner is welcome to contact the undersigned at the number listed below.

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Respectfully submitted,

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